

## SECTION C Descriptions and Specifications

### SECTION C – DESCRIPTION/SPECIFICATIONS/WORK STATEMENT

#### 1. SCOPE OF WORK

##### **A. GENERAL**

The contractor shall provide the manpower, materials and facilities necessary to accomplish the requirements described in this specification and in accordance with the specifications (statement of work) assigned in each delivery order. The contractor's effort shall be in support of the Naval Surface Warfare Center, Carderock Division (NSWCCD), Philadelphia in improving and maintaining the Fleet Operational and Material Readiness of Hull, Mechanical and Electrical (HM&E) Systems and equipment through assessment, development, implementation and coordination of fleet maintenance technology processes. The majority of NSWCCD requirements for fleet support will be remote from the Philadelphia, PA, area.

HM&E machinery systems and equipment include but are not limited to:

- 1) anchor windlass and mooring capstans
- 2) boat davits
- 3) bow thrusters
- 4) cargo, weapons, aircraft and evacuation elevators; truck guards, personnel barriers and associated equipment
- 5) conveyors and dumbwaiters; vertical package, pallet and horizontal
- 6) balanced joiner doors, fire zone doors, diesel doors, helicopter hangar doors, LM 2500 module doors, metal joiner doors, watertight doors, ballistic doors, airtight doors, and hatch covers
- 7) material handling equipment, including fork trucks, dollies, hand trucks, and ammunition hoists
- 8) monorail train systems
- 9) ramps and turntables
- 10) ship and submarine handling and control systems
- 11) steering gear
- 12) stern gate systems
- 13) water barrier gates
- 14) valve actuators
- 15) cranes, booms and rigging
- 16) other HM&E systems and equipment

##### **B. TECHNICAL SUPPORT**

- (1) Provide on-site and in-shop engineering support, technical assistance and training for the operation, maintenance, test, repair, alteration, modification, and upgrade of designated HM&E machinery systems and equipment on U. S. Navy ships. Support repair and maintenance tasks on HM&E equipment as designated in individual delivery orders. This work will be accomplished both in shop and aboard ship.
- (2) Provide labor, logistic and engineering Hull, Mechanical, and Electrical repair and modernization support for U. S. Navy ships. This support will include the planning design, engineering, and installation of alterations, to include, but not limited to, MACHALTs, SHIPALTs, AERs, LARs, ECPs, and other Field Changes as necessary for ship modernization, fleet readiness, and TYCOM initiatives. This support will be provided during CNO, TAV, RAV, DSRA, and other technical availabilities as scheduled by the NSA.

- (3) Provide inspection, repair, and certification support for Material Handling Equipment on Military Sealift Command (MSC) ships worldwide. This support will include, among other requirements, technicians based in Japan to support ship to shop upgrade modifications, refurbishment and parts fabrication, testing, and inspections of equipment onboard MSC ships.
- (4) Accomplish inspection, repair, refurbishment, and/or manufacture of balanced joiner doors, fire zone doors, diesel doors, helicopter hangar doors, LM 2500 module doors, metal joiner doors, watertight doors, ballistic doors, airtight doors, hatch covers, and/or other shipboard closures.
- (5) As specified in individual delivery orders, the contractor shall:
  - (a) Acquire required material and provide component/kit fabrication, assembly, and alteration and equipment installation support for ships
  - (b) Provide logistic support to evaluate, identify and source parts and material
  - (c) Schedule, coordinate and conduct ship visits to inspect designated HM&E machinery systems. In conjunction with such visits:
    - 1. Document operational and material conditions and maintenance deficiencies and make reports to the ship's Commanding Officer.
    - 2. Take on-site corrective actions to eliminate minor discrepancies. Assist ship's force to correct deficiencies within their capability. For deficiencies that require industrial support beyond ship's capability, assist in preparation of documentation to accomplish the required work.
    - 3. For repair work that cannot be performed during the visit, arrange for equipment removal and shipment for depot level repairs at contractor provided material staging and transfer facilities.
    - 4. Provide on-the-job training for shipboard operator and maintenance personnel, to include performance of maintenance and repair techniques.
    - 5. Review and validate COSAL, PMS and technical manuals.
    - 6. Assist ship's force in preparation of technical manual deficiency reports and technical feedback reports.
    - 7. Prior to departing ship, debrief ships Commanding Officer noting condition of equipment, corrective actions taken, and installations made, and provide a prioritized list of outstanding discrepancies.
    - 8. Prepare report that describes conditions found, installations and repairs made, outstanding discrepancies, recommendations for modification to material or maintenance procedures and ship's force participation.
    - 9. Provide on-site on-the-job training for ship's personnel in the operation, test, maintenance and repair of HM&E machinery equipment and systems.
  - (d) Review, evaluate, develop, input, and update software for development plans and processes/procedures.
  - (e) Develop database structures for NSWCCD-SSSES to support assigned programs.

- (f) Provide technical support for communications systems to include the following services:
  - 1. Coordinate communications and administer the Automated Telephone and Voice Mail system for Code 9733.
- (g) Participate in technical and management meetings and conduct visits to government field locations and industry sites.
- (h) Provide task management to include:
  - 1. Planning, scheduling, assigning, and managing work.
  - 2. Engineering, technical, and logistical guidance and assistance to the work force.
  - 3. Product and service quality assurance.
  - 4. Task financial and schedule accountability.

## **C. LOGISTIC SUPPORT**

- (1) The contractor shall provide logistic support for investigations, analyses, reports, and services related to equipment fabrication, assembly, installation, repair, upgrade modernization, refurbishment, transfer and distribution, staging, and maintenance.
- (2) The contractor will be required to:
  - (a) Provide procurement, receipt, inventory control, handling, inspection, staging, storage, disassembly, repair, modernization upgrade, fabrication, refurbishment, cleaning, painting, assembly, adjustment, alignment, and transfer services for designated HM&E equipment, systems, parts and material.
  - (b) Provide for transportation of material and equipment between contractor's facilities and Government facilities.
  - (c) Conduct material research, material sourcing, procurement, inspection, inventory, and staging of both government furnished materials and contractor furnished materials. Develop, update and maintain Government Furnished Material and Equipment (GFM/E) management and tracking system.
  - (d) Provide support to identify drawings and part numbers for stock listing of components and assemblies.
  - (e) Provide and maintain continuous on-line data transmission required to effect technical liaison among SSES activities and the fleet. Procure communication services and supplies including long distance trunk lines, area network communications, and mobile transceiver services. Equipment and material used in this capacity shall be considered to have been delivered to the Government.
  - (f) Provide support for the development of database structures for assigned programs.
  - (g) Develop historical data files for monitoring, modification, upgrade, and repairs for MHE.

## **D. MATERIAL SUPPORT**

- (1) The contractor may be required to:
  - (a) Procure material necessary for the accomplishment of tasks specified in individual delivery orders.

- (b) Procure necessary incidental materials and supplies.
- (2) The contractor may be tasked to:
  - (a) Procure and fabricate general structural components, hardware and special tools.
  - (b) Provide machine and tooling services common to marine and ship repair services.

**E. DELIVERABLES (DATA REQUIREMENTS)** All technical data requirements to be furnished shall be specified on the DD Form 1423 in individual delivery orders under this contract. Data to be delivered are as follows:

- (1) Ship Check Reports. Within five (5) working days of completion, a ship check report will be generated for each tasked ship check to include: pictures, redlined drawings and sketches, procedural and other documentation updates, test results, problem areas, recommendations and general data to include ship, hull, location, date, and points of contact onboard.
- (2) Installation Reports. Within five (5) working days of completion, an installation report will be delivered to include pre- and post- test results, updates and changes to ILS and hardware requirements, recommendations, dates and names of individuals making ILS entries, SNAP entry receipt and general data to include name of installer, ship hull number and name, installation date, onboard points of contact for ILS delivery.
- (3) Monthly Progress Reports. Every 30 days, for each delivery order awarded, the contractor will provide a status report in the format specified in the delivery order.
- (4) Monthly Financial Reports.

## **F. FACILITIES**

- (1) The contractor must have the following facilities in Chesapeake, VA.
  - (a) Provide, operate and maintain OSHA-compliant material/equipment/ staging/storage and transfer facilities with approximately 35,000 square feet of area . NSWCCD may require an increase in the Chesapeake facilities to as much as 55,000 square feet and therefore may task the contractor to provide, operate, and maintain such additional facilities. The Chesapeake facilities must include the following:
    - (i) A minimum of 50,000 square feet of on-site outside staging area to be enclosed by a privacy fence.
    - (ii) Easy access to major arterial roadways for semi-trailers.
    - (iii) Multiple ground level and dock level doors capable of loading and unloading multiple semi-trailers of industrial and material handling equipment.
    - (iv) A minimum of 1,000 amps of electrical service to include 480 volt three-phase power, 208 volt three-phase power and 110 volt single-phase power.
    - (v) Industrial concrete floor with a minimum compressive strength mix of 4,000 psi with reinforced fiber mesh and a minimum thickness of 5.”
    - (vi) High pressure washdown system for equipment with an environmentally approved drain system for the waste water runoff.
    - (vii) An area suitable for sandblasting operations
    - (viii) Minimum of 20’ceiling height in warehouse
    - (ix) Temperature controlled computer room with a separately zoned HVAC system.
    - (x) Separate room for spare parts
    - (xi) Minimum of 100 square feet for storage of hazardous waste material
    - (xii) Multiple battery charging stations
    - (xiii) Compressed air with a minimum of 600 cfm.
    - (xiv) Facility security system(s)

- (b) Sheet Metal Shop – Capable of cutting, rolling, shaping, grinding, and fitting steel and aluminum sheets.
  - (c) Machine Shop – Capable of removing, machining, repairing, testing, cleaning, hydraulic flushing, and reinstallation of HM&E equipment.
  - (d) Pipe Shop – Capable of targeting, fitting, bending, pickling, testing, stress relieving, and threading all kinds of pipe (including brazing).
  - (e) Electric Shop – Capable of removing, repairing, installation, and operational testing of shipboard equipment.
  - (f) Welding Shop – Capable of welding steel and aluminum plates and shapes, and sheet metal, and piping joints
  - (g) Paint Booth - Cross draft spray booth of at least 300 ft<sup>2</sup> which meets all NFPA and OSHA standards and regulations.
- (2) The contractor must provide, operate, and maintain an OSHA-compliant material/equipment/staging/storage and transfer facility with approximately 7,000 square feet of area of which at least 3,000 sq. ft. must be staging area, in the San Diego, CA area, within 25 miles of Naval Station San Diego.
- (3) The contractor must provide, operate, and maintain an OSHA-compliant material/equipment/staging/storage and transfer facility with approximately 5,000 square feet of area of which at least 500 sq. ft. must be staging area, in the Mayport, FL area, within 25 miles of Naval Station Mayport.

## **G. QUALITY ASSURANCE**

The contractor must have a documented quality system accepted by NAVSEA for use on Alteration Installation Team (AIT) Navy contracts.

## **H. REIMBURSEMENT OF TRAVEL COSTS**

(1) Area of Travel. Performance under this contract may require travel by contractor personnel. If travel, domestic or overseas, is required, the Contractor is responsible for making all needed arrangements for his personnel. This includes but is not limited to the following:

Medical Examinations  
Immunizations  
Passports, Visas, etc.  
Security Clearances

(2) Travel Policy. The Government will reimburse the Contractor for allowable travel costs incurred by the Contractor in performance of the contract and determined to be in accordance with FAR subpart 31.2, subject to the following provisions:

- (a) Travel required for tasks assigned under this contract shall be governed in accordance with rules set forth for temporary duty travel in the Department of Defense Joint Travel Regulations: Vol. 2 for Civilian Personnel.
- (b) Per Diem for travel on work assigned under this contract will be reimbursed to employees consistent with the amount authorized in the Department of Defense Joint Travel Regulations.

## **2. PERSONNEL QUALIFICATIONS**

Offerors shall provide resumes having the following desired education and levels of professional and technical experience. The technical evaluation will consider a higher rating for key personnel resumes reflecting experience directly related to the task statements in the Scope of Work. Resumes of key personnel who are present employees of the offeror will be weighted higher during the evaluation than resumes of key personnel who have signed letters of intent. The specialized experience included as part of the desired qualifications shall have been obtained in the fields of endeavor indicated by the applicable labor categories listed below:

A. PROGRAM MANAGER (KEY):

- (1) Fifteen years total managerial experience of engineering projects involving maintenance, repair, testing, and alteration of Naval Ship Hull, Machinery, and Electrical (HM&E) Systems.
- (2) Bachelor of Science Degree in Engineering or a Professional Engineer's License.
- (3) Experience with the Navy 3-M System.
- (4) Knowledge of Naval Sea Systems Command, Naval Surface Warfare Center (Carderock Division), Shipyard, Supervisor of Shipbuilding, and Type Commanders' organizations, responsibility, relationships, policies and procedures.

B. SENIOR ENGINEER

- (1) Eight years total design, test, operation, and maintenance engineering experience in Naval Ship HM&E Systems.
- (2) Bachelor of Science Degree in Engineering or a Professional Engineer's License.
- (3) Experience with the Navy 3-M System.

C. ENGINEER

- (1) Five years total design, test, operation, and maintenance engineering experience in Naval Ship HM&E Systems.
- (2) Bachelors Degree in Mechanical Engineering, Electrical Engineering, Naval Architecture, or the equivalent; or a Professional Engineer's License.

D. PROJECT ENGINEER (KEY)

- (1) Engineering degree or eight years experience managing engineering projects in lieu of engineering degree (This experience cannot be concurrent with the experience requirements listed below).
- (2) Four years experience in operation, maintenance, and testing of Naval Ships HM&E systems and equipment. (May be concurrent with item (3)).
- (3) Minimum of three years experience in project engineering for maintenance, repair, testing, installation, or alteration of Naval Ship systems related to task statements in the Scope of Work.

E. SENIOR ENGINEERING TECHNICIAN (Electrical) (KEY)

- (1) Graduate of high school, trade or industrial school, or GED equivalent, and graduate of shipyard apprenticeship or Navy trade school related to electrical trades.
- (2) Ten years experience practical engineering experience in the operation, maintenance, repair, and alteration of Naval Ship Equipment and systems, of which five years must be in repairing and maintaining electrical components of Material Handling Equipment (MHE), including fork trucks, dollies, and ammunition hoists.
- (3) The five years MHE experience must be current.
- (4) Experience with the Navy 3-M System.

**F. SENIOR ENGINEERING TECHNICIAN (Mechanical) (KEY)**

- (1) Graduate of high school, trade or industrial school, or GED equivalent, and graduate of shipyard apprenticeship or Navy trade school related to mechanical trades.
- (2) Ten years experience practical engineering experience in the operation, maintenance, repair, and alteration of Naval Ship Equipment and systems, of which five years must be in repairing and maintaining mechanical components of Material Handling Equipment (MHE), including fork trucks, dollies, hand trucks, and ammunition hoists.
- (3) The five years MHE experience must be current.
- (4) Experience with the Navy 3-M System.

**G. ENGINEERING TECHNICIAN**

- (1) Graduate of high school, trade or industrial school, or GED equivalent.
- (2) Four years practical engineering experience in the operation, maintenance, repair, and alteration of Naval Ship Equipment and systems.
- (3) Experience with the Navy 3-M System.

**H. LOGISTICIAN**

- (1) Graduate of high school, trade or industrial school, or GED equivalent.
- (2) Six years of Naval Logistics experience which must include the following:
  - (a) Conducting material research, material sourcing, procurement, inspection, inventory, and staging of both government furnished materials and contractor furnished materials.
  - (b) Developing, updating and maintaining Government Furnished Material and Equipment (GFM/E) management and tracking system.
  - (c) Providing support to identify drawings and part numbers for stock listing of components and assemblies.

**I. PLANNER/ESTIMATOR (KEY)**

- (1) Graduate of high school, trade or industrial school, or GED equivalent.
- (2) Five years experience in the following:
  - (a) Experience in preparing Naval industrial costs and time estimates (time, labor and material) for alterations and repairs to Naval HM&E systems and machinery in three or more of the following areas for systems related to task statements in the Scope of Work.
    - (i) Electrical
    - (ii) Machinery
    - (iii) Hull (sheet metal and structural)
    - (iv) Piping (pneumatic and hydraulic)
    - (v) Preparing cost and man-day estimates for engineering studies as related to alterations and installations and modification of ship's systems.
    - (vi) Preparing standard Work Request and Specifications.
    - (vii) Comparing cost relationships for accomplishing work in HM&E Systems.
    - (viii) Preparing Material Lists for alterations.
  - (b) Experience in repair and alteration definition, production procedures, planning procedures, material requirements and technical instructions, including Military Specifications.

**J. SITE FOREMAN (KEY)**

- (1) High School Graduate or GED
- (2) Graduate of apprenticeship program or military trade school

- (3) Eight years hands-on experience with repair and maintenance of Naval HM&E systems and equipment.
- (4) Three years experience in the supervision of technical support for maintenance, repair, alteration, or testing of HM&E ship systems related to task statements in the Scope of Work (can be concurrent with item (3)).
- (5) Certified as a Shipyard Competent Person.

K. QUALITY ASSURANCE SPECIALIST (KEY)

- (1) Minimum of six years experience with quality assurance and inspection for maintenance, repair, testing, installation or alteration of Naval ship systems
- (2) Minimum of two years experience with HM&E systems on Navy ships related to task statements in the Scope of Work.

L. MARINE EQUIPMENT MECHANIC

- (1) Must have completed an apprenticeship program or military trade school.
- (2) Minimum of two years journeyman experience on shipboard HM&E systems and equipment.

M. WELDER/BRAZIER/BURNER

- (1) Must have completed an apprenticeship program or military trade school.
- (2) Minimum of four years journeyman experience on shipboard HM&E systems and equipment.

N. SHIPFITTER/PIPEFITTER

- (1) Must have completed an apprenticeship program or military trade school.
- (2) Minimum of four years journeyman experience on shipboard HM&E systems and equipment.

O. MARINE ELECTRICIAN

- (1) Must have completed an apprenticeship program or Navy trade school.
- (2) Minimum of four years journeyman experience on shipboard HM&E systems and equipment.

P. MACHINIST

- (1) Must have completed an apprenticeship program or Navy trade school.
- (2) Minimum of four years journeyman experience on shipboard HM&E systems and equipment.

Q. PROGRAM ANALYST

- (1) A.A.S. degree and two years experience as a Programmer and/or Database Administrator.
- (2) Certification as a Microsoft Certified Systems Engineer (MCSE).
- (3) Minimum of two years as a Program Analyst. Experience should be in Windows or Unix operating systems.

R. PROGRAMMER

- (1) Two years computer programming experience with digital computer systems, information systems, data management, configuration control applications, or Web application development
- (2) High school diploma and post-high school training in computer programming, database management, or Web page development. An additional two years experience may be substituted for post high-school training.

S. CAD/CAM OPERATOR



- (1) High school diploma and three years experience developing and revising engineering drawings for shipboard systems. Graduation from accredited technical, vocational, or apprentice school drafting program may be substituted for two years experience.
- (2) Minimum of one year experience using AUTOCAD Release 14 or 2000.

#### T. ENGINEERING AIDE

- (1) Minimum of one year experience preparing engineering documentation.
- (2) Must be familiar with Microsoft Office, version 97 or later.

#### U. MAINTENANCE TRADES HELPER

- (1) Experience in assisting skilled maintenance trades in performing duties of lesser skills, including keeping a worker supplied with materials and tools; maintaining cleanliness of tools, work area, and machines; holding materials and tools; and performing other unskilled tasks as directed.